

Remarks

Entry of the foregoing, reexamination and reconsideration of the subject matter of the invention as claimed herein are respectfully requested.

Claims 26 and 35 have been amended to make more clear that the aggregate is embedded in the PVC layer of the floor covering material and is exposed at the upper surface of the barrier layer. One skilled in the art would recognize from the originally presented claims that the aggregate must be embedded in the PVC layer of the material and must be "exposed" at the upper surface of the barrier layer – otherwise it would not be "exposed." This amendment thus does not change the scope of the claims.

For the reasons set forth below, it is respectfully submitted that the requirement for restriction and the rejections set forth the Official Action dated November 2, 2004, are in error. Accordingly, it is requested that the restriction and rejections be withdrawn and that a Notice of Allowability be issued. It is further noted that proper Patent Office Procedure was not followed in mailing the outstanding Official Action since it was not reviewed and signed by the TC Director. *See*, MPEP §2307.02. It is respectfully requested that this procedure be followed, if necessary, for any subsequent correspondence.

Relevant Facts

The instant application was filed November 6, 2002. It is a National Phase application filed pursuant to 35 U.S.C. §371 for PCT/GB99/03169, filed on October 11, 1999. Priority is claimed back to GB 9822019.7, filed on October 8, 1998. An Amendment was filed on October 15, 2003, to copy certain claims of U.S. Patent No. 6,579,610 ("the '610 Patent"). *See*, page 1 of the Amendment. The '610 Patent issued

from Application No. 09/830,041, which was a National Phase application pursuant to §371 for PCT/GB00/00056, filed on January 11, 2000, and claiming priority to GB 9900577.9, filed on January 13, 1999. The instant application thus has an earlier priority date than the '610 Patent.

The '610 Patent recited claims copied from the corresponding PCT application for the instant application. *See*, Preliminary Amendment dated April 20, 2001, page 10; and Amendment dated November 7, 2002, page 7. Applicants for the '610 Patent requested that an interference be declared with any pending U.S. application relating to PCT/GB99/03169, *i.e.*, the instant application. No such interference was declared, and nor is there any indication in the prosecution history that the instant application or the issue of priority of invention was considered.

In the Official Action dated November 2, 2004 for the present application, the previously issued Restriction Requirement was made final (page 2). In addition, the claims were rejected under 35 U.S.C. §112 as well as under 35 U.S.C. §102 (pages 2-5) over several references. All grounds for rejection should likewise apply to claims of the '610 Patent.

Regarding the §112 rejection, the phrases which were objected to by the Examiner ("in the material" and "exposed at the surface of the barrier layer" in claim 26) also appear in claim 31 of the '610 Patent.

Regarding the §102 rejections, the cited art (Sachs et al., U.S. Patent No. 4,196,243; Williams, U.S. Patent No. 5,433,979; and Plusquellec et al., U.S. Patent No. 5,965,198) are all prior art to the '610 Patent. In fact, the instant application has an earlier priority date than the '610 Patent. Thus, the rejections made in the instant application apply equally

to the '610 Patent. It is noted that Plusquellec et al. was cited and overcome during prosecution of the '610 Patent. Neither Sachs et al. nor Williams was cited during prosecution of the '610 Patent.

The Outstanding Official Action Was Improperly Issued

According to MPEP §2307.02: "If the ground of rejection is also applicable to the corresponding claims in the patent, any letter including the rejection must have the approval of the TC Director." In the instant application, the November 2, 2004, Official Action was signed by only the Examiner and SPE. *See*, page 6. The TC Director did not sign the Official Action. This was improper.

As described above, the claims pending in the instant application were all copied from the '610 Patent. Thus, the language objected to as indefinite also appears in the '610 Patent claims. Since the instant application is entitled to an earlier priority date, the prior art rejections made against the instant claims would also apply to the claims of the '610 Patent. Should any of the outstanding grounds for rejection be maintained, and/or should any new grounds for rejection that would apply equally to the '610 Patent be made, any subsequent Official Action must be reviewed and signed by the TC Group Director.

In addition, it is respectfully requested that the propriety of the Restriction Requirement be reviewed and reconsidered by the TC Director since identical claims appear restricted in the '610 Patent. Whether the product and process claims are directed to independent inventions could thus have implications for the '610 Patent claims. This is particularly true since the justification for the restriction was allegedly

that Plusquellec et al. anticipated or rendered obvious claim 26, and claim 26 is identical to claim 31 of the '610 Patent.

Restriction Requirement

It is respectfully requested that the Restriction Requirement be reconsidered and withdrawn. During prosecution of both the instant application and the '610 Patent, an interference was requested and in the instant application is appropriate based upon the copied claims. During prosecution of the '610 Patent, no restriction requirement was made. However, in the instant application, the same claims were restricted into two groups of inventions, the first directed to the floor covering material, and the second directed to a method of producing the claimed floor covering material. The basis for the restriction is that "the special technical features linking the two inventions, a floor covering with a PVC material, does not provide a contribution over the prior art, and no single general inventive concept exists." *See*, Restriction Requirement dated March 23, 2004, page 2. U.S. Patent No. 5,965,198 ("Plusquellec et al.") is cited as rendering claim 26 (previously identified as claim 31) anticipated or obvious, despite the fact that a similar rejection was overcome in the '610 patent.

During the prosecution of the '610 Patent, the claims were rejected as obvious over Plusquellec et al. alone as well as in combination with an additional reference. *See*, *Official Action* dated May 8, 2002. That Plusquellec et al. fails to disclose or even suggest the claimed invention was argued in the Amendment dated November 7, 2002, filed by applicants for the '610 Patent. The rejections were withdrawn and the claims were subsequently allowed. *See*, Notice of Allowability dated February 4, 2003.

Since the instant claims were copied from the '610 Patent and the claims of the '610 Patent were specifically allowed over Plusquellec et al., the cited reference does not anticipate or render obvious any of the instant claims. Additional reasons why Plusquellec et al. does not disclose or suggest the claimed invention are set forth herein, *infra*. The restriction of the instant claims in view of anticipation by Plusquellec et al. is thus improper and should be reconsidered and withdrawn.

Furthermore, applicants respectfully submit that the claims should not be restricted in order to facilitate declaration of an interference. Under MPEP §2303.01, *all* common subject matter between two applications, or similarly between an issued patent and pending application, should be considered in declaring an interference. As stated *supra*, the '610 Patent includes claims directed to both a floor covering material (Group I) and a method of producing the claimed floor covering material (Group II). Thus, in an interference, priority for both the Group I and Group II inventions must be considered. To simplify declaration of an interference, all of the copied claims in the instant application should be kept together in one case. The floor covering material and method of producing the floor covering material should all be in one interference; however, if deemed appropriate, the claims could be designated as corresponding to separate Counts.

If the claims are restricted, declaration of an interference could be greatly delayed. The non-elected Group II claims would have to be presented in a divisional application and allowable claims found before an interference could be declared. To ensure the just and speedy declaration of an interference and resolution of allowable claims, as well as decrease pendency of the instant application, the restriction requirement should be withdrawn.

Moreover, restriction is only proper if there is a serious burden on the Examiner to examine both groups of inventions. MPEP §803. In the instant case, there would be no serious burden for the Examiner to examine claims directed to a floor covering material as well as claims directed to a method for making such floor covering material, as it is just that claimed method which is used to produce the claimed floor covering material.

Rejection under §112

Claim 26 has been rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. This rejection is respectfully traversed. Applicants note that the same language which is being objected to in applicants' claim 26 also appears in claim 31 of the '610 Patent. This rejection, if proper, would thus apply to the '610 Patent as well.

When judging whether a claim is indefinite, the claim must be read in light of the specification and the clarity judged from the perspective of a person skilled in the art. *Beachcombers, International, Inc. v. WildeWood Creative Products, Inc.*, 31 F.3d 1154, 31 USPQ2d 1653 (Fed. Cir. 1994).

The phrase "in the material" in claim 26 was objected to as allegedly being unclear. More specifically, the Office Action asserts that it is unclear whether the aggregate is embedded in the polyvinyl chloride layer or the barrier layer of the polymeric material. One skilled in the art would clearly recognize that "the material" refers back to the "floor covering material" recited earlier in the preamble of the claim. Thus, it is clear that the aggregate is embedded in the floor covering material. It is further clear that the "floor covering material" is being referenced based upon the later recitation of "the material" as incorporating "a barrier layer of polymeric material other

than PVC fused into the upper surface of the PVC layer.” In the context of the claim, it is sufficiently clear that “the material” is the “floor covering material,” as recited in the preamble. As amended, the claim makes even more clear that the aggregate is embedded in the PVC layer of the floor covering material.

In addition, the phrase “exposed at the surface of the barrier layer” in claim 26 was said in the rejection to be allegedly unclear. Contrary to the assertion in the Official Action, it is respectfully asserted that a person skilled in the art would know on which surface of the barrier layer the aggregate is exposed. One skilled in the art would clearly recognize that the aggregate is exposed at the upper surface of the barrier layer. Such aggregate could only be “exposed” on the upper surface since the lower surface is fused to the PVC layer thereby covering the aggregate. *See*, page 3, third paragraph. In addition, the purpose of the embedded aggregate is “for providing surface roughness.” This can only be achieved by having the aggregate at the upper surface. Moreover, Figure 1 shows that the aggregate is exposed at the upper surface of the barrier layer. *See also*, page 10, last paragraph, which describes Figure 1. In addition, the claims as amended make clear that the aggregate is exposed at the upper surface.

In view of the above, it is respectfully requested that the rejection of claim 26 under §112, second paragraph, be reconsidered and withdrawn. Such action is believed to be in order.

Sachs et al., USP 4,196,243¹

Claims 26-29 and 32 have been rejected as allegedly anticipated by Sachs et al. under 35 U.S.C. §102(b). This rejection is respectfully traversed.

¹ This reference is cited on the face of the Altro patent (USP 6,579,610)

The Official Action asserts:

Sachs et al. disclose a non-skid floor covering with a wear, barrier, layer fused over a polyvinyl chloride substrate (Column 1, lines 60-62 and 66). Since the two layers of materials are fused together, it is inherent that the barrier layer is at least as flexible as the underlying polyvinyl chloride layer. The wear layer is made with a thermoplastic material of a polyurethane material (Column 2, lines 36-37), which is cured through exposure to an ultra-violet light (Column 5, line 29). Incorporated in with the wear layer are no-skid plastic particles, aggregate, exposed to a surface to provide surface roughness (Column 7, lines 29-40).

This assertion is in error. Sachs et al. does not disclose a floor covering as claimed. Sachs et al. discloses a non-skid PVC floor covering having a wear layer over the vinyl substrate. The wear layer can be "any suitable material with conventional PVC organosol or plastisol wear layers and urethane wear layers being preferred." Column 2, lines 34-37. According to Sachs et al., particulate plastics material may be dispersed in the upper wear layer to provide an uneven surface for the wear layer. *See*, column 1, lines 32-34; column 3, lines 9-13. At the very least, Sachs et al. does not disclose or suggest including aggregate embedded in the lower PVC layer as opposed to the barrier or wear layer.

Nor does Sachs et al. disclose or suggest having aggregate embedded in a first PVC layer and "exposed at the upper surface of the barrier layer," as instantly claimed. Sachs et al. states that particulate plastics material may be included in wear layers (column 7, lines 41-45). However, this recitation does not teach or even suggest that aggregate can be embedded in the PVC layer, and that the aggregate should be exposed at the upper surface of the barrier layer, as instantly claimed.

Furthermore, Sachs et al. does not teach or suggest using aggregate to provide surface roughness to the floor covering material, as instantly claimed. The particles included in the Sachs et al. floor covering are "particulate plastics material." Such particles would not provide the surface roughness when exposed, as does the claimed aggregates. The difference between the particulate plastics material and the claimed aggregates is particularly evidence by looking at the preferred embodiments, as recited in claim 34, of quartz, corundum and/or silicon carbide.

Nor does Sachs et al. teach a barrier layer that specifically is *not* PVC. As stated in the instant specification (page 2), a floor covering with a PVC surface layer will stain easily. In contrast, while Sachs et al. teaches the use of urethane wear layers, PVC organosol and plastisol are also contemplated as wear layers. This disclosure does not teach or suggest that PVC should *not* be used as the barrier layer, as claimed by applicants.

Sachs et al., in fact, teaches away from the instantly claimed invention. In the background of the invention, Sachs et al. states: "While sheet vinyl flooring having particulate matter protruding from the surface thereof has been manufactured, the particles used have been so soft that they have not been effective in providing a non-skid surface." Column 1, lines 16-20. Sachs et al. thus teaches that you could not have aggregate embedded in the material and exposed at the surface, which aggregate would provide surface roughness, as required by applicants' claims. Thus, Sachs et al. neither anticipates nor renders obvious the claimed invention, since a teaching away is the antithesis of obviousness.

Accordingly, in view of the above argument, reconsideration and withdrawal of the rejection of the claims under §102(b) as anticipated by Sachs et al. are respectfully requested and believed to be in order.

Williams, USP 5,433,979²

Claims 26-34 have been rejected as allegedly being anticipated by Williams under 35 U.S.C. §102(b). This rejection is respectfully traversed.

The Official Action asserts:

Williams discloses a non-slip surface (Column 3, lines 1-2) comprising a polyvinyl chloride floor matting material (Column 3, lines 10-11) covered with a barrier material of polyurethane or polyester, which is used to provide a surface roughness on an exposed surface through an aggregate material of silicon carbide embedded in the surface (Column 4, lines 11-36). The barrier layer is a cured thermoplastic material (Column 4, lines 39-46) that is flexible as the underlying polyvinyl chloride layer (Column 3, lines 61-68) and is transparent (Column 5, lines 27-34). The barrier layer provides enhanced dirt release and stain resistance in comparison with the polyvinyl chloride layer (Column 2, lines 37-40) while being shaped, embossed, through deformation (Column 3, lines 22-25)

This assertion is in error. Williams discloses a polymer backing material that has mineral particles adhered to the surface of the backing by a radiation-curable adhesive. The minerals are to provide a non-slip surface. *See*, Column 2, line 67 – column 3, line 2. The backing material is then laminated or bonded to a PVC flooring material. The backer material is “selected from the group consisting of polyurethane, polyester, polystyrene, polypropylene and other synthetic or natural polymer materials,

² This reference is not cited on the face of the Altro patent (USP 6,579,610)

preferably a polyvinyl chloride backer, which compliment several of the physical properties of that substrate.” Column 4, lines 25-30.

Williams fails to disclose or suggest a flooring material where aggregate are embedded in the PVC layer of the material and are exposed at the upper surface of the barrier layer. According to Williams, a size coat is “applied over the distributed abrasive grit particles.” Column 4, lines 47-53. The mineral particles are thus “imbedded therein” into the resin system. Column 4, lines 58-60. There is no teaching of having the particles embedded in one layer and exposed at the upper surface of the second barrier layer, as instantly claimed.

Nor does Williams teach that the polymeric material should be “other than PVC,” as instantly claimed. PVC is one of the choices for the backing material, and is, in fact, a preferred choice.

Thus, as Williams fails to anticipate the claimed invention, reconsideration and withdrawal of the rejection of record are respectfully requested. Such action is believed to be in order.

Plusquellec et al., USP 5,965,198³

Claims 26, 28, 29 and 33 have been rejected as allegedly being anticipated by Plusquellec et al. (“Plusquellec et al.”) under 35 U.S.C. §102(e). This rejection is respectfully traversed.

The Official Action asserts:

³ This reference is cited on the face of the Altro patent (USP 6,579,610)

Plusquellec et al. disclose a non-skid floor covering with a coating, barrier, layer fused over a polyvinyl chloride substrate (Column 4, lines 14-20). Since the two layers of materials are fused together, it is inherent that the barrier layer is at least as flexible as the underlying polyvinyl chloride layer. The coating layer is made with a thermoplastic material (Column 12, lines 33-36) where incorporated in with the coating layer are vinyl polymer plastic particles, aggregate, exposed to a surface to provide surface roughness (Column 6, lines 29-31).

Plusquellec et al. discloses a PVC substrate "in which the particles for incorporation form a single matrix with the thermoplastic base material in at least one surface layer of the coating layer, and the latter comprises practically no plastifying agent consisting of at least one volatile organic compound which has a vapor pressure of at least 0.1 Pa at 20°C." Column 4, lines 17-23. Plusquellec et al. further states that "the particles must form a homogeneous matrix which is integrated with the thermoplastic base material, if possible as soon as they are incorporated into the plastisol, and at least into a surface layer of the coating layer, and in any event after gelling. It follows that there is no sedimentation of the particles, nor encapsulation of the latter in the matrix of the coating layer." Column 4, lines 24-30.

Plusquellec et al. does not disclose or suggest a floor covering having aggregate embedded in the PVC layer of the floor covering material, where the aggregate are exposed at the upper surface of a barrier layer, as instantly claimed. Plusquellec et al. discloses a process whereby the particles are accelerated toward the external surface of the coating layer particles, but the particles remain "incorporated homogeneously in at least one, top or back, surface layer of said coating layer." *See*, claim 1.

Nor does Plusquellec et al. teach a floor covering having a barrier layer that is "other than PVC" fused into the upper surface of the PVC layer, as instantly claimed.

The coating layer in the cited reference appears to be a plastisol (*see*, column 6, lines 66-67), which can be PVC. *See*, column 6, lines 24-30.

The Examiner cites Claim 10 of Plusquellec et al., which appears at column 12, lines 33-36, as disclosing that “[t]he coating layer is made with a thermoplastic material.” However, it is respectfully submitted that this assertion is incorrect. The “thermoplastic material” being referred to in claim 10 is the material of which the particles are made (*see*, claim 1(c) and 1(d)). These particles are clearly different from the “aggregate” embedded in the material for providing surface roughness.” There is nothing in Plusquellec et al. teaching that the incorporated PVC particles would provide any surface roughness. The PVC particles would be quite different from the aggregate, which is instantly disclosed as preferably being “quartz, corundum and/or silicon carbide.” *See*, claim 34.

During prosecution of the ‘610 Patent, rejections of the corresponding claims under §103 in view of Plusquellec et al. were apparently withdrawn in view of the following arguments:

The materials of Claims 31 to 46 and 61 to 69 are also distinguished from the disclosure of Plusquellec. Plusquellec Patent discloses a material having a coating wherein the coating is formed of a plastisol, applied in the pasty state and then powdered with a plastic powder. Accordingly, Plusquellec reference does not disclose anything about the incorporation of particles to provide a non-slip roughening effect to enhance slip resistance as provided in claim 31 or the inclusion of aggregate to provide surface roughness as provided in claim 61. Plusquellec disclosure makes clear that the powdered plastic included in the coating layer becomes a part of the coating layer when the layer is cured.

Neither the Chen nor Plusquellec references disclose or suggest alone or in combination the method specified in claim 47, which provides for a base portion of a flooring material on which a powder having components of a coating portion is added. Thereafter particulate material is added and the base and components are heated to form a film. In the Chen reference, the coating layer is separately

applied to the finished base layer. In Plusquellec reference there is no addition of particulate material.

Amendment dated November 7, 2002, page 6.

In view of the arguments stated above, as well as the reasons that the instant claims were found patentable over Plusquellec et al. during prosecution of the '610 Patent, the rejection under §102 in view of Plusquellec et al. should be reconsidered and withdrawn. Such action is respectfully requested and believed to be in order.

III. Conclusions

In view of the above, Applicants respectfully request that the Restriction Requirement and all outstanding rejections be withdrawn. A Notice of Allowance is respectfully requested and believed to be in order. Upon the finding of allowable subject matter, an interference should then be declared between the instant application and the '610 Patent.

No additional fees are believed to be due in connection with this correspondence. However, if any fees are due, please charge any payments due to our Deposit Account No. 08-0219.

The Examiner is invited to telephone the undersigned at the telephone number given below in order to expedite the prosecution of the Application.

Date: February 22, 2005

Respectfully submitted,



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BAKER BOTTS LLP

Attorney Docket Number: A34204 PCT USA

Title: NON STAIN FLOORING

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GROUP 3600

Use Space Below for Additional Information:

Total claims with amendment if 56. Fee due for 36 additional claims - \$648

Application filed with 55 claims. Applicant paid for 35 additional claims - \$630

The balance due for one new additional claim \$ 18

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26 11/20/02
FILE NO. A34204 PCT USA

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Shortland et al.
Serial No. : 09/830,041 Examiner : Amir, Nahid
Filed : April 20, 2001 Group Art Unit: 3665
For : NON STAIN FLOORING

AMENDMENT

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GROUP 3600

I hereby certify that this paper is being deposited
with the United States Postal Service as first class mail in
an envelope addressed to: Assistant Commissioner for
Patents, Washington, D.C. 20231

November 7, 2002

Date of Deposit

James J. Maune
Attorney Name

Signature

26,946

PTO Registration No

November 7, 2002

Date of Signature

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:

Responsive to the Office Action dated May 8, 2002, a three month extension of the time
to respond is requested. The required fee is enclosed.

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Please amend the application as follows:

In the claims:

B¹ 12 ~~42~~. (Amended) A flooring material according to claim ~~41~~ ¹¹ wherein the first particulate material is any one or more of a number of types of hard particles.

B² 17 ~~47~~. (Amended) A method of making a flooring material comprising a base portion, a coating portion imparting improved stain resistance to the flooring material and positioned on an upper surface of the base portion to form an upper surface of the flooring material and a first particulate material embedded in the coating portion and at least partially penetrating the base portion to provide a roughening effect to the upper surface of the flooring material for enhanced slip resistance and protection from wear, the method comprising the steps of:-

- a) mixing together the components of the base portion;
- b) spreading the mixed components of the base portion on a surface;
- c) applying at least one first dressing of components of the coating portion in powder form to the components of the base portion to at least partially penetrate the base portion;
- d) applying at least one dressing of a first particulate material to the components of the coating portion in powder form;
- e) heating the base portion and said at least one first dressing to cause the components of the coating portion in powder form to form a film.

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B3 21st. (Amended) A method according to claim 17 wherein when the base portion is heated the components of the coating portion in powder form melt and flow to form the film.

Add the following new claims:

B4 5th. (New) A flooring material as specified in claim 42 wherein the hard particles include particles of a material selected from the group comprising silicon carbide, silica, aluminum oxide, emery and flint.

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REMARKS

In the Office Action dated May 8, 2002, the Examiner objected to claim 42 and rejected claims 47 and 51 as indefinite, citing informalities in the claims. As set forth above applicants have amended claims 42, 47 and 51 to overcome these objections and rejections. New claim 86 is presented.

Claims 31 to 46 stand rejected as anticipated or obvious in view of the Chen reference alone or in view of Plusquellec. Claims 47 to 85 are rejected as obvious in view of Plusquellec alone, or in view of Chen. While Applicants made the invention claimed prior to the effective filing dates to which these references are entitled, Applicants traverse the rejections on the grounds that even if these references were valid references under 35 USC Section 102, they do not anticipate or render the claimed invention obvious. Accordingly Applicants request reconsideration of the current rejections based on prior art in view of the remarks set forth below.

Applicants invention as set forth in claims 31 to 46 is a novel floor covering material having a base portion, a stain resistant coating portion in contact with the upper surface of the base portion, and a particulate embedded in the coating portion and at least partially penetrating the base portion to provide a roughened effect of the upper surface for enhanced slip resistance and protection from wear.

The invention as set forth in claims 61 to 69 is a flooring material having a PVC layer with aggregate embedded in the PVC layer, and a barrier layer of polymeric material fused into the upper surface of the PVC layer. The aggregate is exposed at the surface of the barrier layer.

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Accordingly, the flooring according to the invention includes aggregate material that extends fully from the base layer and through the barrier or coating layer to provide a slip resistance to the flooring while having stain resistance arising out of the coating layer. As pointed out on page 3 of the specification, starting on line 7, the fact that the aggregate extends into the base layer provides greater durability to the slip resistant characteristics of the flooring.

Claims 47 to 60 and 70 to 85 set forth methods for making the flooring material of the invention.

The Chen Application relates to a wear resistant coating, which is useful for a flooring material. In accordance with the Chen Application the outermost coating of a flooring material is provided with particles, such as alumina particles to impart wear resistance to the finish coating of the product. The coating is formed either by spreading the particles over a still wet coating and allowing the particles to sink into the coating or by mixing the particles into a coating material used to form the layer.

An important distinction of the Chen product from the product claimed in the present application is the fact that the intention of providing particles to the coating layer is to improve wear resistance of the layer. Accordingly the particles may be quite small and may be allowed to sink into the coating layer.

In contrast to the material disclosed by Chen, the flooring material of Claims 31 to 46 is a flooring material having particles which are not only contained within the coating layer, but which also penetrate the base layer. As pointed out on page 3 of the specification this

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penetration adds a measure of durability to the particles as they are not easily dislodged from the surface by traffic because of the penetration into the base layer.

The material of claims 61 to 69 is likewise distinguished from the material of Chen, since the material of these claims includes particulate material embedded in a PVC layer and extending through a barrier layer to be exposed at the surface of the barrier layer. The particles of the Chen material are provided in the coating layer, not the underlying PVC layer.

The materials of Claims 31 to 46 and 61 to 69 are also distinguished from the disclosure of Plusquellec. The Plusquellec Patent discloses a material having a coating wherein the coating is formed of a plastisol, applied in the pasty state and then powdered with a plastic powder. Accordingly, the Plusquellec reference does not disclose anything about the incorporation of particles to provide a non-slip roughening effect to enhance slip resistance as provided in claim 31 or the inclusion of aggregate to provide surface roughness as provided in claim 61. The Plusquellec disclosure makes clear that the powdered plastic included in the coating layer becomes a part of the coating layer when the layer is cured.

Neither the Chen nor the Plusquellec references disclose or suggest alone or in combination the method specified in claim 47, which provides for a base portion of a flooring material on which a powder having components of a coating portion is added. Thereafter particulate material is added and the base and components are heated to form a film. In the Chen reference, the coating layer is separately applied to the finished base layer. In the Plusquellec reference there is no addition of particulate material.

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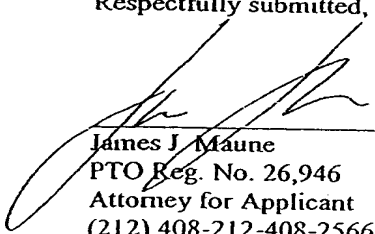
Likewise neither of the references disclose or suggest the method of claim 70 wherein a film forming powder and particulate aggregate is added over a plastisol on a substrate, and the arrangement is heated to fuse the plastisol and convert the powder into a film with the aggregate exposed at the surface of the film.

It is respectfully submitted that neither of the references applied disclose or suggest the invention as specified in any of claims 31 to 85 or new claim 86. Accordingly, the pending claims are in condition for allowance.

As indicated in the Preliminary Amendment filed concurrently with this application claims 61 to 85 are copied from PCT/GB/03169, which designates the United States. In the event that a corresponding U.S. Patent Application is pending, applicants request that an Interference be declared.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

42. (Amended) A flooring material according to claim 41 wherein the first particulate material is any [on] one or more of a number of types of hard particles [including a silicon carbide, silicas, aluminum oxide, emery and flint].
47. (Amended) A method of making a flooring material comprising a base portion, a coating portion imparting improved stain resistance to the flooring material and positioned on an upper surface of the base portion to form an upper surface of the flooring material and a first particulate material embedded in the coating portion and at least partially penetrating the base portion to provide a roughening effect to the upper surface of the flooring material for enhanced slip resistance and protection from wear, the method comprising the steps of:-
- a) mixing together the components of the base portion;
 - b) spreading the mixed components of the base portion on a surface;
 - c) applying at least one first dressing of components of the coating portion in powder form to the components of the base portion to at least partially penetrate the base portion;
 - d) applying at least one dressing of a first particulate material to the components of the coating portion in powder form;
 - e) heating the [powder coated] base portion and said at least one first dressing to cause the [powder coating] components of the coating portion in powder form to form a film.

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PATENT

51. (Amended) A method according to claim 47 wherein when the [powder coated paste] base portion is heated the [powder coating melts and flows] components of the coating portion in powder form melt and flow to form the film.

86. (New) A flooring material as specified in claim 42 wherein the hard particles include particles of a material selected from the group comprising silicon carbide, silica, aluminum oxide, emery and flint.

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Notice of Allowability	Application No.	Applicant(s)	
	09/830,041	SHORTLAND ET AL.	
	Examiner	Art Unit	
	Nahid Amiri	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 18 November 2002.
2. ☒ The allowed claim(s) is/are 31-86.
3. ☒ The drawings filed on 01 June 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1 <input type="checkbox"/> Notice of References Cited (PTO-892) 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material	2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ 6 <input type="checkbox"/> Examiner's Amendment/Comment 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9 <input type="checkbox"/> Other
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Application/Control Number: 09/830,041
Art Unit: 3635

Page 2

DETAILED ACTION

Claims 31-86 are allowed.


The following is a statement of reasons for the indication of allowable subject matter: the article and method of a particulate material embedded in the coating portion partially penetrating into the base portion, having article and method of aggregate material embedded in the PVC layer and exposed at the surface of the barrier layer.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (703) 305-4241 and Fax number is 703-308-3686. The examiner can normally be reached on Monday-Friday from 8:00-5:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Carl Friedman can be reached at (703) 308-0839.

na

February 04, 2003


Carl D. Friedman
Supervisory Patent Examiner
Group 3600

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NOTICE OF ALLOWANCE AND FEE(S) DUE

21003

7590

02/07/2003

BAKER & BOTTS
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

AMIRI, NAHID

ART UNIT

CLASS-SUBCLASS

3635

052-177000

DATE MAILED: 02/07/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,041	06/01/2001	Adrian John Shortland	A34204-PCT-U	9445

TITLE OF INVENTION: NON STAIN FLOORING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	\$0	\$1300	05/07/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status.
See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Box ISSUE FEE
Commissioner for Patents
Washington, D.C. 20231
Fax (703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)
21003 7590 02/07/2003

BAKER & BOTTS
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO. 09/830,041	FILING DATE 06/01/2001	FIRST NAMED INVENTOR Adrian John Shortland	ATTORNEY DOCKET NO. A34204-PCT-U	CONFIRMATION NO. 9445
-------------------------------	---------------------------	---	-------------------------------------	--------------------------

TITLE OF INVENTION: NON STAIN FLOORING

APPLN. TYPE nonprovisional	SMALL ENTITY NO	ISSUE FEE \$1300	PUBLICATION FEE \$0	TOTAL FEE(S) DUE \$1300	DATE DUE 05/07/2003
EXAMINER AMIRI, NAHID	ART UNIT 3635	CLASS-SUBCLASS 052-177000			

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ individual ☐ corporation or other private group entity ☐ government

4a. The following fee(s) are enclosed:

☐ Issue Fee
☐ Publication Fee
☐ Advance Order - # of Copies

4b. Payment of Fee(s):

☐ A check in the amount of the fee(s) is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).

Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

(Authorized Signature)

(Date)

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMIT THIS FORM WITH FEE(S).

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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,041	06/01/2001	Adrian John Shortland	A34204-PCT-U	9445
21003	7590		EXAMINER	
	02/07/2003		AMIRI, NAHID	
			ART UNIT	PAPER NUMBER
			3635	

DATE MAILED: 02/07/2003

Determination of Patent Term Extension under 35 U.S.C. 154 (b)
(application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (<http://pair.uspto.gov>)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,041	06/01/2001	Adrian John Shortland	A34204-PCT-U	9445
21003	7590	02/07/2003	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			AMIRI, NAHID	
			ART UNIT	PAPER NUMBER
			3635	

DATE MAILED: 02/07/2003

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: <http://www.uspto.gov/main/howtofees.htm>.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

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QUERY CONTROL FORM		PA IDC #12	
Application No.	09/830041	Prepared by	Jannotti
Examiner-GAU	Friedman-3635	Date	3/11/03
		No. of queries	2
		Tracking Number	0573071
		Week Date	3/3/03
		E	

JACKET		
a. Serial No.	f. Foreign Priority	k. Print Claim(s)
b. Applicant(s)	g. Disclaimer	l. Print Fig.
c. Continuing Data	h. Microfiche Appendix	m. Searched Column
d. PCT	i. Title	n. PTO-270/328
e. Domestic Priority	j. Claims Allowed	o. PTO-892
		p. PTO-1449
		q. PTOL-85b
		r. Abstract
		s. Sheets/Figs
		t. Other

SPECIFICATION	MESSAGE
a. Page Missing	
b. Text Continuity	
c. Holes through Data	
d. Other Missing Text	
e. Illegible Text	
f. Duplicate Text	
g. Brief Description	
h. Sequence Listing	
i. Appendix	
j. Amendments	
k. Other	
CLAIMS	
a. Claim(s) Missing	
b. Improper Dependency	
c. Duplicate Numbers	
d. Incorrect Numbering	
e. Index Disagrees	
f. Punctuation	
g. Amendments	
h. Bracketing	
i. Missing Text	
j. Duplicate Text	
k. Other	
	<p>Foreign priority: All requirements for foreign priority appear to have been met. Please acknowledge the priority claim and please acknowledge receipt of the certified copy.</p> <p>PTO 1449: Please either initial or line through citation.</p> <p>RECEIVED</p> <p>Mar 15 2003</p> <p>Publishing Division 12</p> <p>Please advise.</p> <p>Thank you</p> <p>RESPONSE</p> <p>Sending out Notice of allowability and acknowledging the priority claim</p>

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,041	06/01/2001	Adrian John Shortland	A34204-PCT-U	9445

21003 7590 05/08/2002

BAKER & BOTTS
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

AMIRI, NAHID

ART UNIT	PAPER NUMBER
----------	--------------

3635

DATE MAILED: 05/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/830,041	SHORTLAND ET AL	
	Examiner	Art Unit	
	Nahid Amiri	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-85 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-85 is/are rejected.
- 7) ☒ Claim(s) 42 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

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Application/Control Number: 09/830,041
Art Unit: 3635

Page 2

DETAILED ACTION

Claim Objections

1. Claim 42 objected to because of the following informalities: on page 47 the following words are misspelled "on", "silicas", "aluminium". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 42 recites the broad recitation "any one or more of a number of types of hard particles, and the claim also recites "including a silicon carbide, silica, aluminum oxide, emery and flint" which is the narrower statement of the range/limitation.

Claim 47 and 51 recites the limitation "powder coated base portion" on page 4, line e. There is insufficient antecedent basis for this limitation in the claim.

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Application/Control Number: 09/830,041
Art Unit: 3635

Page 3

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 31-33, 35-36, 40-42, 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Pub No. US2001/0028945 A1 Chen et al.

In regard to claim 31: Chen discloses the claim invention in FIG. 10, page 2, a flooring material comprising a base portion A, a coating portion B imparting improved stain resistance to the flooring material being positioned in contact with an upper surface of the base portion A and C and creating an upper surface of the flooring material, and a first particulate material embedded in the coating portion B and at least partially penetrating the base portion to provide a roughening effect of the upper surface of the flooring material for enhanced slip resistance and protection from wear.

In regard to claims 32-33: Chen discloses the claim invention on page 7, paragraph 0074, that the flooring material is poly (vinyl chloride) PVC, a modified acrylic polymer or a polyolefins.

In regard to claim 35-36: Chen discloses the claim invention on page 3, paragraph 0026, that the wear resistant particles which are part of at least one layer of the surface covering can be added in any manner to a layer by mixing into a wet coating or scattered on top of a wet coating. Also on page 2, paragraph 0021 the surface covering comprising at least one layer containing wear-resistant aluminum oxide particles.

In regard to claim 40-41: Chen discloses the claim invention on FIG. 8, page 6, paragraph 0059, that the backing layer (base portion) made up of one of more layers A, C and D and also on page 7, paragraph 0074, that the three flooring material is made of poly (vinyl chloride) PVC which is plastic.

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Application/Control Number: 09/830,041
Art Unit: 3635

Page 4

In regard to claim 42: Chen discloses the claim invention on page 2, paragraph 0022, that the first particulate material flooring material include the hard particles which include silicon carbide and aluminum oxide and silica.

In regard to claim 44: Chen discloses the claim invention on page 3, paragraph 0029 the coating thickness and the particles size of wear resistant particles are chosen in a way that a desired portion of the particles merge into the base portion.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 34, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pub No. US2001/0028945 A1 Chen in view of US Patent No. 5,965,198 Plusquellec et al.

In regard to claim 34: Chen discloses the claimed invention except for the base portion made of PVC plastisol material. Plusquellec teaches that the thin plastic web generally including at least one coating layer and which itself comprising a substrate made up of at least one thermoplastic base material as set forth in column 1, line 6-9. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use plastic as base material, as taught by Plusquellec in order to have floor with stain resistance.

In regard to claim 46: Chen discloses the claim invention except for coating portion made of thermoplastic material. Plusquellec discloses the claim invention on column 1, line 65-67 that the plastic web including at least one coating layer made up of at least one thermoplastic base material.

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5. Claims 37-39, 43, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pub No. US2001/0028945 A1 Chen et al.

In regard to claim 37, 43: Chen discloses the claim invention except for base portion contain pigment PVC chips, quartz chips or other decorative additives. It would have been an obvious matter of design choice to use pigment as a decorative purposes since applicant has not disclosed that using the pigment solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with Chen invention.

In regard to claim 38-39: Chen discloses the claim invention except for reinforcement support. Chen discloses on page 7, paragraph 0067, that the backing layer used in surface covering is made of fiber glass. It would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that the fiber glass act as reinforcement support to create more wear/stain resistance floor.

In regard to claim 45: Chen discloses the claim invention except for a flooring material that the amount of coating portion merged into the base portion decreases as the distance from the meeting of the base portion and the coating portion increases. Chen discloses on page 3, paragraph 0029, that the scattering of the wear resistant particles are preferably be very uniform and precise. It would have been an obvious matter of design choice to decrease the amount of coating portion since applicant has not disclosed any facts that shows it solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with Chen invention.

5. Claims 47-55, 57-66, 68, 70-79, 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,965,198 Plusquellec et al.

In regard to claim 47-48, 51-52, 71: Plusquellec discloses the claim invention except heating the coating base portion to cause the powder coating to form a film. Plusquellec discloses in FIG. 1, that: a) Mixing together the plasticizers component of the coating layer (base portion), column 2, line 36-54. b) Spreading the plastisol is deposited as a coating layer (base portion) on a surface, cloumn2, line 5-6. c) Applying at least one dressing of component particle of plastic powder toward the external surface of the coating layer (base portion) and the particles thus accelerated are distributed according to the external surface of coating layer, column 2, line

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11-12. d) a plastisol is arranged in the pasty state and plastic powder are accelerate by gravity toward the external surface of the coating layer in the pasty state. It would have been obvious to one of ordinary skill in the art at the time the invention was made to recognized that when coating layer (base portion) is pasty it means is wet and been heated which cause the powder coating to melt and flow to form a film.

In regard to claims 49-50: Plusquellec discloses the claim invention on column 6, line 64-67, that source 2 of plastisol 3 may be a hopper containing it used in combination with a station for depositing 4, a doctor blade, the plastisol 3 as a layer onto a flat support 5, to obtain layer 6 in the pastry state. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use doctor blade as taught by Plusquellec in order to spread the paste in controlled thickness.

In regard to claims 51-54: Plusquellec discloses the claim invention on column 5, line 28-42, that the powdering stage is repeated at least once after the gelling stage the coating layer is preferably grained and also on column 5, line 48-50, that the quantity of powder which can be absorbed by the plastisol and in other hand to improve the entry of the powder into the plastisol. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have base layer in form of gel as taught by Plusquellec in order to apply the coating layer and recognize the plastisol as a base portion.

In regard to claims 55, 57, 68: Plusquellec discloses the claim invention on column 8, line 34-40, that the powdering additives such as silica and variety of oxides added to plastic powder and spread to paste at a controlled thickness. It would have been obvious matter design choice to use emery or flint, and aggregate is quartz or corundum and/or silicon carbide as powdering coat material also the flooring material to be embossed since applicant has not disclosed that by using different type of powdering coat material solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with powdering additive which Plusquellec used in his invention.

In regard to claims 58-60: Plusquellec discloses the claim invention in FIG 3, column 7, line 22-26, that coating potion is plastic powder 10 applied by sparing system which is sparing turbine. Also discloses on column 8, line 31-35, shows that various PVC which can be employed as a mixture with a single powdering or with two successive powdering, and on

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column 8, line 38-41, shows that more than one particulate material take place such as silica and variety of oxides. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use PVC coating powder material as stain resistance.

In regard to claims 61-66: Plusquellec discloses the claim invention on column 8, line 30-35, that floor covering material made of PVC homopolymers or copolymers (polymeric material), and also on column 11, line 44-49, that powdering coating layer particles made of at least one thermoplastic material. It would have been obvious matter design choice to have aggregate embedded material and barrier layer been transparent or translucent as a decorative purposes since applicant has not disclosed that by using different type of transparent barrier layer materials enhance dirt release and using different type of powdering coat solves any stated problem or is for any particular purpose and it appears that the invention would perform equally with Plusquellec's coating powder and barrier layer. Also it would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that since barrier layer made of polymeric material therefore it would be at least as flexible as the underlying PVC layer.

In regard to claims 70: Plusquellec discloses the claim invention except heating the coating base portion to cause the powder coating to form a film and aggregated exposed at the surface of the film. Plusquellec discloses on column 6, line 28-30, that base material made of PVC, column 2, line 36-54, spreading the plastisol is deposited as a coating layer (base portion) on a surface of base portion on column 8, line 30-35, that floor covering material made of PVC homopolymers or copolymers (polymeric material). It would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that when coating layer (base portion) is pasty it means is wet and been heated which cause the powder coating to melt and flow to form a film. Also it would have been obvious matter design choice for aggregate to expose at the surface of the film since applicant has not disclosed that by using different type of powdering coat material solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with powdering additive which Plusquellec used in his invention.

In regard to claims 71-79: Plusquellec discloses the claim invention except the powder distributed over the plastisol prior to the aggregate material, plastisol softened prior to distribution of the aggregate and also powder distributed over the plastisol simultaneously with

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aggregate and excess powder is removed from plastisol prior to step C by suction. Plusquellec discloses on column 1, line 20-26, covering include one or more layers obtained by calendaring or coating and themselves comprising multiple or varied decorations onto which can be optionally applied a protective layer called a wear layer, on abstract powdering coat material including particle of a thermoplastic and provide curable resin system. It would have been obvious matter design choice to have different type of coating materials since applicant has not disclosed that by using different type of powdering coat material and by applying powder prior to aggregate or aggregate prior to powder or apply simultaneously solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with powdering additive which Plusquellec used in his invention. Also it would have been obvious to one of ordinary skill in the art at the time the invention was made that because the powder particle made of thermoplastic therefore is a curable resin system and would be cured by heat, also it is matter of decorative design choice to remove the excess powder from plastisol prior to using the heat by using the suction.

In regard to claim 85: Plusquellec discloses the claim invention column 4, line 41-48, that the plastic powder including particles of at least one thermoplastic material which capable of being integrated or of dissolving at least partially, or even completely and homogeneously in the macromolecular matrix of the substrate of the plastisol. It would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that there is at least one of flow modifying agent, a flame retardant and gloss modifier exists in his invention by having poly material.

6. Claims 65, 67, 69, 80-84 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,965,198 Plusquellec et al., as further in view of Pub No. US2001/0028945 A1 Chen.

In regard to claim 65: Plusquellec discloses the claim invention except the product is cured for 1-10 minutes at 150-220 C. Chen discloses on page 4, paragraph 0038, that the product is cured at 190-230 F. It would have been obvious to one of ordinary skill in the art at the time the invention was made to see the Plusquellec temperature range is within the applicant temperature range and also poly material uses same amount of time range to cure.

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In regard to claim 67: Plusquellec discloses the claim invention except barrier layer made of polyolefin, co-polyester, polyurethane, phenol formaldehyde, epoxy or acrylic polymer or a mixture thereof. Chen discloses in page 7, paragraph 0067, that the substrate or backing (barrier) layer can be made of none crosslinked vinyl scrim, and polyester non-woven sheets. It would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that the polyester is made of poly material and it is matter of design choice what combination of poly should been used for barrier layer since applicant has not disclosed that by using his combination of poly material or different type aggregate solve any stated problem or is for any particular purpose and it appears that the invention would perform equally well with Chen's poly material combination.

In regard to claim 69 and 84: Plusquellec discloses the claim invention except the material and method the aggregate is quartz, corundum, and/or silicon carbide. Chen discloses on page 2, paragraph 0022 that the wear particles include but are not limited to carborundum, quartz, and silica. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have different type of aggregate material as wear material to have non-resistance surface.

In regard to claims 80-83: Plusquellec discloses the claim invention except resin system is curable by UV radiation and powder made of polyolefin, co polyester, co-polyamide a mixture and embossing apply to step (c). Chen discloses on page 16, paragraph 189, that cure last topcoat by UV radiation curing chamber. Also on page 17, paragraph 5, shows that the cured layer comprising a polyamine amide, a polyamide and page 18 paragraph 23 that top coat also made of silica. It would have been obvious to one of ordinary skill in the art at the time the invention was made having embossing material or different type of aggregate material is a mater of design choice since applicant has not disclosed that by having embossing material solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well Plusquellec's powdering coat.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (703) 305-4142. The examiner can normally be reached on Monday-Friday from 8:00-4:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Carl Friedman can be reached at (703) 308-0839.

na

May 2, 2002


Carl D. Friedman
Supervisory Patent Examiner
Group 3600

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Notice of References Cited	Application/Control No. 09/830,041	Applicant(s)/Patent Under Reexamination SHORTLAND ET AL.	
	Examiner Nahid Amiri	Art Unit 3635	Page 1 of 1

U.S. PATENT DOCUMENTS

*	A	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-2001/0028945 A1	07-1998	Chen et al.	52/177
	B	US-5,965,198	04-1997	Plusquellec et al	428/292.1
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS


*	N	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*	U	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a))
 Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

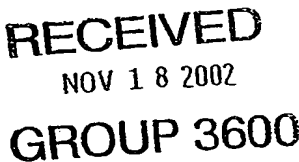
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11/20/02

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)		Docket Number (Optional) A34204 PCT USA		
	In re Application of Shortland et al.		Filed April 20, 2001	
	Application Number 09/830,041			
	For NON STAIN FLOORING			* see attached
	Group Art Unit 3665		Examiner Amir, Nahid	

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and appropriate non-small-entity fee are as follows (check time period desired):

<input type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$ _____
<input type="checkbox"/> Two months (37 CFR 1.17(a)(2))	\$ _____
<input checked="" type="checkbox"/> Three months (37 CFR 1.17(a)(3))	\$ 920
<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$ _____
<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$ _____



☐ Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee amount shown above is reduced by one-half, and the resulting fee is: \$ _____

☒ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Commissioner has already been authorized to charge fees in this application to a Deposit Account.

☒ The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 02-4377.
 I have enclosed a duplicate copy of this sheet.

I am the ☐ applicant/inventor

☐ assignee of record of the entire interest. See 37 CFR 3.71.
 Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

☒ attorney or agent of record.

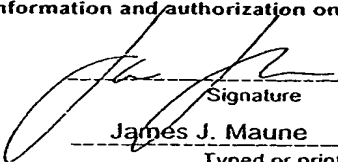
☐ attorney or agent under 37 CFR 1.34(a).
 Registration number if acting under 37 CFR 1.34(a) _____

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Nov. 7, 2002 _____

Date

PTO Reg No.: _____



Signature

James J. Maune

Typed or printed name

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ Total of _____ forms are submitted.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,041	06/01/2001	Adrian John Shortland	AJ4204-PCT-U	9445

21003 7590 03/24/2003
BAKER & BOTTS
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

AMIRI, NAHID

ART UNIT	PAPER NUMBER
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3635

DATE MAILED: 03/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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8

Notice of Allowability

Application No.

09/830,041

Examiner

Nahid Amiri

Applicant(s)

SHORTLAND ET AL.

Art Unit

3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 18 November 2002.
2. ☒ The allowed claim(s) is/are 31-86.
3. ☒ The drawings filed on 01 June 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

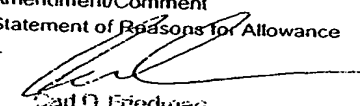
7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |


 Carl D. Friedman
 Supervisory Patent Examiner
 Group 3600

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PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail Box ISSUE FEE**
Commissioner for Patents
Washington, D.C. 20231
Fax (703)746-4000

B/14

INSTRUCTIONS: This form should be used for transmitting the **ISSUE FEE** and **PUBLICATION FEE** (if required). Blocks 1 through 4 should be completed where applicable. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

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Certificate of Mailing or Transmission
 I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below.

Paul A. Ragusa, PTO #38,587 (Depositor's name)
April 21, 2003 (Date)

APPLICATION NO. 09/830,041	FILING DATE 06/01/2001	FIRST NAMED INVENTOR Adrian John Shortland	ATTORNEY DOCKET NO. A34204-PCT-U	CONFIRMATION NO. 9445
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APPLN. TYPE nonprovisional	SMALL ENTITY NO	ISSUE FEE \$1300	PUBLICATION FEE \$0	TOTAL FEE(S) DUE \$1300	DATE DUE 05/07/2003
EXAMINER AMIRI, NAHID	ART UNIT 3635	CLASS-SUBCLASS 052-177000			

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47, Rev. 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1. **BAKER BOTTS LLP**
 2. _____
 3. _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE
ALIRO LIMITED
Hertfordshire, United Kingdom

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent)

4a. The following fee(s) are enclosed:
☒ Issue Fee
☐ Publication Fee
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):
☒ A check in the amount of the fee(s) is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.

☒ The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number **02-4377** (enclose an extra copy of this form).

Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

Paul A. Ragusa
 (Authorized Signatory)
April 21, 2003
 (Date)

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant, a registered attorney or agent, or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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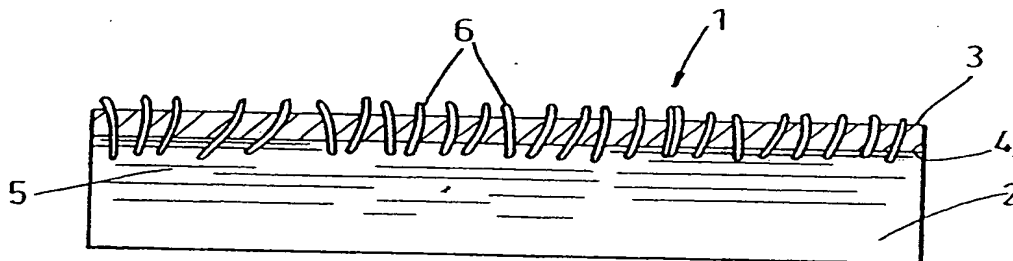


Fig. 1

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PATENT APPLICATION FEE DETERMINATION RECORD Effective October 1, 2000

Application or Docket Number
09/830041

CLAIMS AS FILED - PART I

	(Column 1)	(Column 2)
TOTAL CLAIMS		
FOR	NUMBER FILED	NUMBER EXTRA
TOTAL CHARGEABLE CLAIMS	1 minus 20 =	
INDEPENDENT CLAIMS	1 minus 3 =	
MULTIPLE DEPENDENT CLAIM PRESENT		<input type="checkbox"/>

* If the difference in column 1 is less than zero, enter "0" in column 2

CLAIMS AS AMENDED - PART II

	(Column 1)		(Column 2)	(Column 3)
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	55	Minus	20	= 35
Independent	4	Minus	3	= 1
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				<input type="checkbox"/>

	(Column 1)		(Column 2)	(Column 3)
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total		Minus		=
Independent		Minus		=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				<input type="checkbox"/>

	(Column 1)		(Column 2)	(Column 3)
AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total		Minus		=
Independent		Minus		=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				<input type="checkbox"/>

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

SMALL ENTITY TYPE ☐

RATE	FEE
BASIC FEE	
X\$ 9=	
X40=	
+135=	
TOTAL	

OR OTHER THAN SMALL ENTITY

RATE	FEE
BASIC FEE	560
X\$18=	
X80=	
+270=	
TOTAL	860

SMALL ENTITY TYPE ☐

RATE	ADDITIONAL FEE
X\$ 9=	
X40=	
+135=	
TOTAL ADDIT. FEE	

OR OTHER THAN SMALL ENTITY

RATE	ADDITIONAL FEE
X\$18=	630
X80=	80
+270=	
TOTAL ADDIT. FEE	710

RATE	ADDITIONAL FEE
X\$ 9=	
X40=	
+135=	
TOTAL ADDIT. FEE	

RATE	ADDITIONAL FEE
X\$18=	
X80=	
+270=	
TOTAL ADDIT. FEE	

RATE	ADDITIONAL FEE
X\$ 9=	
X40=	
+135=	
TOTAL ADDIT. FEE	

RATE	ADDITIONAL FEE
X\$18=	
X80=	
+270=	
TOTAL ADDIT. FEE	

**MULTIPLE DEPENDENT CLAIM
FEE CALCULATION SHEET**
(FOR USE WITH FORM PTO-875)

SERIAL NO.

09/830041

FILING DATE

APPLICANT(S)

CLAIMS

	AS FILED		AFTER 1st AMENDMENT		AFTER 2nd AMENDMENT	
	IND.	DEP.	IND.	DEP.	IND.	DEP.
1						
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TOTAL IND.						
TOTAL DEP.						
TOTAL CLAIMS						

	*		*		*	
	IND.	DEP.	IND.	DEP.	IND.	DEP.
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99						
100						
TOTAL IND.						
TOTAL DEP.						
TOTAL CLAIMS						

* MAY BE USED FOR ADDITIONAL CLAIMS OR ADMDNMENTS

